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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,528	07/24/2001	Jaime A. Ampuero Auza	KP2310USNA	4837

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WILMINGTON, DE 19805

EXAMINER

TORRES VELAZQUEZ, NORCA LIZ

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 01/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

15

Office Action Summary	Application No. 09/911,528	Applicant(s) AMPUERO AUZA ET AL.	
	Examiner Norca L. Torres-Velazquez	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-15 is/are pending in the application.
- 4a) Of the above claim(s) 8,9,14 and 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7 and 10-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Response to Arguments***

1. Applicant's arguments with respect to claims 1, 3-7 and 10-13 have been considered but are moot in view of the new ground(s) of rejection. The Declaration under 37 CFR 1.132 has been considered by the Examiner and Applicants' arguments in light of the presented Declaration overcome the previous rejection of the claims under 35 U.S.C. 103(a) over HENDREN '578 in view of TOKARSKY '267 since the fibrids of Hendren represent a binder. However, in the present office action the TOKARSKY '267 reference is applied as primary reference since it provides a material that comprises aramid (pulp, floc or mixtures) that read on the presently claimed wettable structural organic floc and also provides the teaching of using between 5-25% of a binder (in the form of a water dispersible polymeric material or aramid fibrids). The HENDREN '578 is applied as secondary reference to provide for the claimed fluoropolymer floc as stated below.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3-7 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over TOKARSKY (US 4,698,267) in view of HENDREN et al. (US 4,866,578).

TOKARSKY teaches a high density para-aramid paper comprising short para-aramid fibers selected from the group consisting of para-aramid pulp, para-aramid floc and mixtures

Art Unit: 1771

thereof. (Col. 1, lines 54-56) The paper contains 5 to 25 percent, by weight, binder. Water dispersible polymeric materials are preferred binder. Another preferred binder is aramid fibrids, preferably of poly(m-phenylene isophthalamide). It is noted that the reference teaches the use of binders as an option, however, in the present interpretation the Examiner uses the alternative structure of using from 5-25% of binder taught by the reference. (Col. 2, lines 1-28) The reference teaches that the use of binders such as fibrids or binder resins greatly facilitates the handling of the para-aramid papers during preparation of the papers and are essential when the papers are to be continuously impregnated with resin for the preparation of laminates. (Col. 3, lines 40-44) With regards to the basis weight of the material, the reference teaches sheets of about 102 gsm. (Col. 5, line 33 and Tables I and II) With regards to the thickness of the sheet, the reference teaches values that read on the presently claimed thickness. (Refer to Tables I and II) The Examiner equates the para-aramid floc to the presently claimed wettable structural organic floc; the binder at the percentage claimed is anticipated by the reference.

The reference further teaches that fluorocarbon resins may also be used where their special properties, e.g. low dielectric constant, low dielectric loss, and low moisture regain, are desired. (Col. 3, lines 37-39)

While TOKARSKY recognizes the use of a fluoropolymer, it fails to teach the use of a fluoropolymer floc.

HENDREN et al. is directed to a high heat resistant oil-impregnable insulation board having a dielectric constant in mineral oil of less than 2.7. The board has 35-60 wt.% aromatic polyamide fibrous materials, preferably MPD-I and 40-65 wt.% PTFE fibrous materials (such as floc). (Col. 1, lines 51-57)

Art Unit: 1771

Since both references are directed to fibrous materials that include floc, pulp and fibrids, the purpose disclosed by HENDREN would have been recognized in the pertinent art of TOKARSKY.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the sheet material of TOKARSKY and provide with a fluoropolymer floc material with the motivation of producing a material that has a high heat resistance while also having a low dielectric constant as disclosed by HENDREN. (Col. 2, lines 22-24). With regards to claim 13, it is noted that the teachings of TOKARSKY are broad enough as to encompass the presently claimed combination of 10% meta-aramid fibrid and about 9% of a resin. Further, the use of meta-aramid floc instead of the para-aramid floc used by TOKARSKY would have been an obvious modification in light of the HENDREN et al. reference, which teaches the use of MPD-I (meta-aramid) floc material in the production of a similar material with high heat resistance and low dielectric constant. (Refer to HENDREN Col. 1, lines 18-20 and Col. 2, lines 22-25)

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Norca L. Torres-Velazquez whose telephone number is 571-272-1484. The examiner can normally be reached on Monday-Thursday 8:00-4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1771

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Norca L. Torres-Velazquez
Examiner
Art Unit 1771

January 13, 2005